LVDS – 1.25 Gbps LVDS Quad Repeater

UT54LVDS454



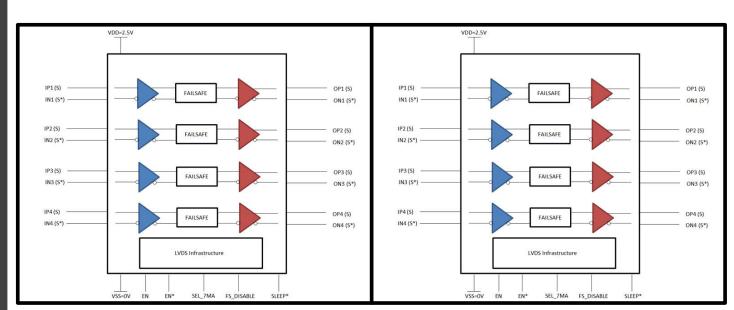
For space applications demanding high speed, high-reliability and harsh environment serial link communications, Cobham Advanced Electronic Solutions UT54LVDS454, 1.25 Gbps LVDS Dual Transceiver/Quad Repeater is designed for high speed and low power.

The small QML package footprint and user-selectable TX drive strengths allow for optimal payload and system power dissipation configurability based on the user-specified serial link data rates. The UT54LVDS454 high-

speed LVDS Transceiver/Receiver is ideal for buffer protection of FPGA's and processors as well as box-to-box communication within a satellite.

The all-pins cold-sparing feature coupled with the user-supplied external TX/RX buffer differential 100Ω termination, allows for maximum application flexibility in systems with mission critical serial link full redundancy requirements

Product is available now in prototypes and production QML-Q, QML-V qualifications.



Quad Repeater

Dual Transceiver

LVDS – 1.25 Gbps LVDS Quad Repeater

UT54LVDS454

Features:

- 1.25 Gbps LVDS Dual Transceiver/Quad Repeater
- Single 2.5 V Power Supply
- Low Power
- Protocol Independent
- Data Rates up to 1.25 Gbps per Channel
- Cold Sparing on All-pins
- Low Propagation Delay (Latency)
- Low Channel-to-Channel Skew
- Supports up to 1 meter of FR4 PCB or 10 meters of cable up to 1.25Gbps
- Fail-safe Function for Loss of Signal Detection
- Compatible with TIA/EIA-644A LVDS Standard

Applications:

- Serial point-to-point link repeater
- FPGA I/O buffer protector
- LVDS Cold Spare applications

Operational Environment:

- Temp Range: -55°C to +105°C
- Single 2.5 V Power Supply
- TID: 100 krad(Si)
- SEL Immune: < 100 MeVcm2/mg

Physical:

- Package Options: 71 pin CLGA, CBGA, CCGA
- 9 x 10mm, 1mm pin pitch

Power:

170mW (typical)

Qualifications:

QML-V Qualified